



PCT09

#4/10

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/890,729

DATE: 01/22/2002
 TIME: 10:17:23

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3 <110> APPLICANT: Yoshinaga, Steven
 4 Mak, Tak
 5 Shahinian, Arda
 6 Trafuri Bladt, Anna
 7 Senaldi, Giorgio
 9 <120> TITLE OF INVENTION: Polypeptides Involved in Immune Response
 11 <130> FILE REFERENCE: A-579B
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/890,729
 C--> 13 <141> CURRENT FILING DATE: 2000-01-27
 13 <150> PRIOR APPLICATION NUMBER: 09/890,729
 14 <151> PRIOR FILING DATE: 2000-01-27
 16 <150> PRIOR APPLICATION NUMBER: PCT/US00/01871
 17 <151> PRIOR FILING DATE: 2000-01-27
 19 <150> PRIOR APPLICATION NUMBER: US 09/264,527
 20 <151> PRIOR FILING DATE: 1999-03-08
 22 <150> PRIOR APPLICATION NUMBER: US 09/244,448
 23 <151> PRIOR FILING DATE: 1999-02-03
 25 <160> NUMBER OF SEQ ID NOS: 35
 27 <170> SOFTWARE: PatentIn version 3.0
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 30 <211> LENGTH: 600
 31 <212> TYPE: DNA
 32 <213> ORGANISM: Mus musculus
 34 <220> FEATURE:
 35 <221> NAME/KEY: CDS
 36 <222> LOCATION: (1)..(600)
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 41 1 5 10 15
 43 ctt tta aca gga gaa atc aat ggc tgc gcc gat cat agg atg ttt tca 96
 44 Leu Leu Thr Gly Glu Ile Asn Gly Ser Ala Asp His Arg Met Phe Ser
 45 20 25 30
 47 ttt cac aat gga ggt gta cag att tct tgt aaa tac cct gag act gtc 144
 48 Phe His Asn Gly Gly Val Gln Ile Ser Cys Lys Tyr Pro Glu Thr Val
 49 35 40 45
 51 cag cag tta aaa atg cga ttg ttc aga gag aga gaa gtc ctc tgc gaa 192
 52 Gln Gln Leu Lys Met Arg Leu Phe Arg Glu Arg Glu Val Leu Cys Glu
 53 50 55 60
 55 ctc acc aag acc aag gga agc gga aat gcg gtg tcc atc aag aat cca 240
 56 Leu Thr Lys Thr Lys Gly Ser Gly Asn Ala Val Ser Ile Lys Asn Pro
 57 65 70 75 80
 59 atg ctc tgt cta tat cat ctg tca aac aac agc gtc tct ttt ttc cta 288

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60 Met Leu Cys Leu Tyr His Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
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63 aac aac cca gac agc tcc cag gga agc tat tac ttc tgc agc ctg tcc      336
64 Asn Asn Pro Asp Ser Ser Gln Gly Ser Tyr Tyr Phe Cys Ser Leu Ser
65      100                      105                      110
67 att ttt gac cca cct cct ttt caa gaa agg aac ctt agt gga gga tat      384
68 Ile Phe Asp Pro Pro Pro Phe Gln Glu Arg Asn Leu Ser Gly Gly Tyr
69      115                      120                      125
71 ttg cat att tat gaa tcc cag ctc tgc tgc cag ctg aag ctc tgg cta      432
72 Leu His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Leu Trp Leu
73      130                      135                      140
75 ccc gta ggg tgt gca gct ttc gtt gtg gta ctc ctt ttt gga tgc ata      480
76 Pro Val Gly Cys Ala Ala Phe Val Val Val Leu Leu Phe Gly Cys Ile
77 145                      150                      155                      160
79 ctt atc atc tgg ttt tca aaa aag aaa tac gga tcc agt gtg cat gac      528
80 Leu Ile Ile Trp Phe Ser Lys Lys Lys Tyr Gly Ser Ser Val His Asp
81      165                      170                      175
83 cct aat agt gaa tac atg ttc atg gcg gca gtc aac aca aac aaa aag      576
84 Pro Asn Ser Glu Tyr Met Phe Met Ala Ala Val Asn Thr Asn Lys Lys
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87 tct aga ctt gca ggt gtg acc tca      600
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89      195                      200
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93 <211> LENGTH: 200
94 <212> TYPE: PRT
95 <213> ORGANISM: Mus musculus
97 <400> SEQUENCE: 2
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104      20                      25                      30
107 Phe His Asn Gly Gly Val Gln Ile Ser Cys Lys Tyr Pro Glu Thr Val
108      35                      40                      45
111 Gln Gln Leu Lys Met Arg Leu Phe Arg Glu Arg Glu Val Leu Cys Glu
112      50                      55                      60
115 Leu Thr Lys Thr Lys Gly Ser Gly Asn Ala Val Ser Ile Lys Asn Pro
116 65      70                      75                      80
119 Met Leu Cys Leu Tyr His Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
120      85                      90                      95
123 Asn Asn Pro Asp Ser Ser Gln Gly Ser Tyr Tyr Phe Cys Ser Leu Ser
124      100                      105                      110
127 Ile Phe Asp Pro Pro Pro Phe Gln Glu Arg Asn Leu Ser Gly Gly Tyr
128      115                      120                      125
131 Leu His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Leu Trp Leu
132      130                      135                      140
135 Pro Val Gly Cys Ala Ala Phe Val Val Val Leu Leu Phe Gly Cys Ile
136 145      150                      155                      160
139 Leu Ile Ile Trp Phe Ser Lys Lys Lys Tyr Gly Ser Ser Val His Asp

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140                               165                               170                               175
143 Pro Asn Ser Glu Tyr Met Phe Met Ala Ala Val Asn Thr Asn Lys Lys
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147 Ser Arg Leu Ala Gly Val Thr Ser
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152 <211> LENGTH: 200
153 <212> TYPE: PRT
154 <213> ORGANISM: Mus musculus
156 <400> SEQUENCE: 3
158 Met Lys Pro Tyr Phe Cys Arg Val Phe Val Phe Cys Phe Leu Ile Arg
159 1                               5                               10                               15
161 Leu Leu Thr Gly Glu Ile Asn Gly Ser Ala Asp His Arg Met Phe Ser
162                               20                               25                               30
164 Phe His Asn Gly Gly Val Gln Ile Ser Cys Lys Tyr Pro Glu Thr Val
165                               35                               40                               45
167 Gln Gln Leu Lys Met Arg Leu Phe Arg Glu Arg Glu Val Leu Cys Glu
168                               50                               55                               60
170 Leu Thr Lys Thr Lys Gly Ser Gly Asn Ala Val Ser Ile Lys Asn Pro
171 65                               70                               75                               80
173 Met Leu Cys Leu Tyr His Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
174                               85                               90                               95
176 Asn Asn Pro Asp Ser Ser Gln Gly Ser Tyr Tyr Phe Cys Ser Leu Ser
177                               100                              105                              110
179 Ile Phe Asp Pro Pro Pro Phe Gln Glu Arg Asn Leu Ser Gly Gly Tyr
180                               115                              120                              125
182 Leu His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Leu Trp Leu
183                               130                              135                              140
185 Pro Val Gly Cys Ala Ala Phe Val Val Val Leu Leu Phe Gly Cys Ile
186 145                              150                              155                              160
188 Leu Ile Ile Trp Phe Ser Lys Lys Lys Tyr Gly Ser Ser Val His Asp
189                               165                              170                              175
191 Pro Asn Ser Glu Tyr Met Phe Met Ala Ala Val Asn Thr Asn Lys Lys
192                               180                              185                              190
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195                               195                              200
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198 <211> LENGTH: 218
199 <212> TYPE: PRT
200 <213> ORGANISM: Mus musculus
202 <400> SEQUENCE: 4
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205 1                               5                               10                               15
207 Val Thr Glu Asn Lys Ile Leu Val Lys Gln Ser Pro Leu Leu Val Val
208                               20                               25                               30
210 Asp Ser Asn Glu Val Ser Leu Ser Cys Arg Tyr Ser Tyr Asn Leu Leu
211                               35                               40                               45
213 Ala Lys Glu Phe Arg Ala Ser Leu Tyr Lys Gly Val Asn Ser Asp Val
214                               50                               55                               60

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216 Glu Val Cys Val Gly Asn Gly Asn Phe Thr Tyr Gln Pro Gln Phe Arg
217 65              70              75              80
219 Ser Asn Ala Glu Phe Asn Cys Asp Gly Asp Phe Asp Asn Glu Thr Val
220              85              90              95
222 Thr Phe Arg Leu Trp Asn Leu His Val Asn His Thr Asp Ile Tyr Phe
223              100             105             110
225 Cys Lys Ile Glu Phe Met Tyr Pro Pro Pro Tyr Leu Asp Asn Glu Arg
226              115             120             125
228 Ser Asn Gly Thr Ile Ile His Ile Lys Glu Lys His Leu Cys His Thr
229              130             135             140
231 Gln Ser Ser Pro Lys Leu Phe Trp Ala Leu Val Val Val Ala Gly Val
232 145             150             155             160
234 Leu Phe Cys Tyr Gly Leu Leu Val Thr Val Ala Leu Cys Val Ile Trp
235              165             170             175
237 Thr Asn Ser Arg Arg Asn Arg Leu Leu Gln Val Thr Thr Met Asn Met
238              180             185             190
240 Thr Pro Arg Arg Pro Gly Leu Thr Arg Lys Pro Tyr Gln Pro Tyr Ala
241              195             200             205
243 Pro Ala Arg Asp Phe Ala Ala Tyr Arg Pro
244              210             215
246 <210> SEQ ID NO: 5
247 <211> LENGTH: 44
248 <212> TYPE: PRT
249 <213> ORGANISM: Artificial sequence
251 <220> FEATURE:
252 <221> NAME/KEY: misc_feature
253 <223> OTHER INFORMATION: Synthetic
256 <400> SEQUENCE: 5
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259 1              5              10              15
261 Asn Tyr Phe Cys Pro Pro Pro Ser Gly His Ile Glu Leu Cys Lys Leu
262              20              25              30
264 Trp Leu Val Phe Leu Leu Leu Ile Trp Pro Arg Ala
265              35              40
267 <210> SEQ ID NO: 6
268 <211> LENGTH: 966
269 <212> TYPE: DNA
270 <213> ORGANISM: Mus musculus
272 <220> FEATURE:
273 <221> NAME/KEY: CDS
274 <222> LOCATION: (1)..(966)
276 <400> SEQUENCE: 6
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278 Met Gln Leu Lys Cys Pro Cys Phe Val Ser Leu Gly Thr Arg Gln Pro
279 1              5              10              15
281 gtt tgg aag aag ctc cat gtt tct agc ggg ttc ttt tct ggt ctt ggt      96
282 Val Trp Lys Lys Leu His Val Ser Ser Gly Phe Phe Ser Gly Leu Gly
283              20              25              30
285 ctg ttc ttg ctg ctg ttg agc agc ctc tgt gct gcc tct gca gag act      144

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286	Leu	Phe	Leu	Leu	Leu	Ser	Ser	Leu	Cys	Ala	Ala	Ser	Ala	Glu	Thr	
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289	gaa	gtc	ggg	gca	atg	gtg	ggc	agc	aat	gtg	gtg	ctc	agc	tgc	att	gac
290	Glu	Val	Gly	Ala	Met	Val	Gly	Ser	Asn	Val	Val	Leu	Ser	Cys	Ile	Asp
291		50					55					60				
293	ccc	cac	aga	cgc	cat	ttc	aac	ttg	agt	ggg	ctg	tat	gtc	tat	tgg	caa
294	Pro	His	Arg	Arg	His	Phe	Asn	Leu	Ser	Gly	Leu	Tyr	Val	Tyr	Trp	Gln
295	65					70				75					80	
297	atc	gaa	aac	cca	gaa	gtt	tcg	gtg	act	tac	tac	ctg	cct	tac	aag	tct
298	Ile	Glu	Asn	Pro	Glu	Val	Ser	Val	Thr	Tyr	Tyr	Leu	Pro	Tyr	Lys	Ser
299					85					90				95		
301	cca	ggg	atc	aat	gtg	gac	agt	tcc	tac	aag	aac	agg	ggc	cat	ctg	tcc
302	Pro	Gly	Ile	Asn	Val	Asp	Ser	Ser	Tyr	Lys	Asn	Arg	Gly	His	Leu	Ser
303				100					105				110			
305	ctg	gac	tcc	atg	aag	cag	ggg	aac	ttc	tct	ctg	tac	ctg	aag	aat	gtc
306	Leu	Asp	Ser	Met	Lys	Gln	Gly	Asn	Phe	Ser	Leu	Tyr	Leu	Lys	Asn	Val
307			115					120					125			
309	acc	cct	cag	gat	acc	cag	gag	ttc	aca	tgc	cgg	gta	ttt	atg	aat	aca
310	Thr	Pro	Gln	Asp	Thr	Gln	Glu	Phe	Thr	Cys	Arg	Val	Phe	Met	Asn	Thr
311		130				135						140				
313	gcc	aca	gag	tta	gtc	aag	atc	ttg	gaa	gag	gtg	gtc	agg	ctg	cgt	gtg
314	Ala	Thr	Glu	Leu	Val	Lys	Ile	Leu	Glu	Glu	Val	Val	Arg	Leu	Arg	Val
315	145				150					155					160	
317	gca	gca	aac	ttc	agt	aca	cct	gtc	atc	agc	acc	tct	gat	agc	tcc	aac
318	Ala	Ala	Asn	Phe	Ser	Thr	Pro	Val	Ile	Ser	Thr	Ser	Asp	Ser	Ser	Asn
319				165						170				175		
321	ccg	ggc	cag	gaa	cgt	acc	tac	acc	tgc	atg	tcc	aag	aat	ggc	tac	cca
322	Pro	Gly	Gln	Glu	Arg	Thr	Tyr	Thr	Cys	Met	Ser	Lys	Asn	Gly	Tyr	Pro
323			180						185				190			
325	gag	ccc	aac	ctg	tat	tgg	atc	aac	aca	acg	gac	aat	agc	cta	ata	gac
326	Glu	Pro	Asn	Leu	Tyr	Trp	Ile	Asn	Thr	Thr	Asp	Asn	Ser	Leu	Ile	Asp
327		195					200					205				
329	acg	gct	ctg	cag	aat	aac	act	gtc	tac	ttg	aac	aag	ttg	ggc	ctg	tat
330	Thr	Ala	Leu	Gln	Asn	Asn	Thr	Val	Tyr	Leu	Asn	Lys	Leu	Gly	Leu	Tyr
331		210				215						220				
333	gat	gta	atc	agc	aca	tta	agg	ctc	cct	tgg	aca	tct	cgt	ggg	gat	gtt
334	Asp	Val	Ile	Ser	Thr	Leu	Arg	Leu	Pro	Trp	Thr	Ser	Arg	Gly	Asp	Val
335	225				230					235					240	
337	ctg	tgc	tgc	gta	gag	aat	gtg	gct	ctc	cac	cag	aac	atc	act	agc	att
338	Leu	Cys	Cys	Val	Glu	Asn	Val	Ala	Leu	His	Gln	Asn	Ile	Thr	Ser	Ile
339				245					250					255		
341	agc	cag	gca	gaa	agt	ttc	act	gga	aat	aac	aca	aag	aac	cca	cag	gaa
342	Ser	Gln	Ala	Glu	Ser	Phe	Thr	Gly	Asn	Asn	Thr	Lys	Asn	Pro	Gln	Glu
343			260						265					270		
345	acc	cac	aat	aat	gag	tta	aaa	gtc	ctt	gtc	ccc	gtc	ctt	gct	gta	ctg
346	Thr	His	Asn	Asn	Glu	Leu	Lys	Val	Leu	Val	Pro	Val	Leu	Ala	Val	Leu
347		275					280						285			
349	gcg	gca	gcg	gca	ttc	gtt	tcc	ttc	atc	ata	tac	aga	cgc	acg	cgt	ccc
350	Ala	Ala	Ala	Ala	Phe	Val	Ser	Phe	Ile	Ile	Tyr	Arg	Arg	Thr	Arg	Pro

VERIFICATION SUMMARY

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L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
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